

## **Comments on the DOE NOPR**

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*These comments reflect the personal views of the author, Edward Kee. The views presented here are not necessarily shared by Mr. Kee's clients or colleagues and these views do not represent the corporate position of Mr. Kee's employer, CRA International, Inc.*

Title XVII of the Energy Policy Act of 2005 (EPAct) provides loan guarantee benefits to certain energy technologies, including new nuclear power plants; the loan guarantee program is to be implemented and administered by the Department of Energy (DOE).

New nuclear power plants are expected to be one of the major beneficiaries of the loan guarantee program and other provisions of the EPAct. The EPAct benefits were intended to spur the development of the first round of new nuclear investments in the US. The successful development of 6 or more new nuclear plants would demonstrate to potential nuclear plant owners and lenders that the new NRC licensing approach, improvements in nuclear plant design, and management of nuclear plant costs could result in commercially successful projects.

However, DOE's approach to loan guarantees may not achieve the objectives of the legislation.

### **A. Concerns with DOE's approach**

Three aspects of the DOE approach may mean that the loan guarantee program does not achieve the goals of Title XVII:

- Debt structure
- Subsidy cost calculations
- Government role in commercial risks

#### **1. Debt structure**

There are three aspects of the DOE NOPR that define the debt of borrowers under the loan guarantee program.

##### **1.1. Limit on Guarantee creates Requirement for Non-Guaranteed Debt**

The NOPR limits guaranteed loans to 80% of eligible project costs and to 90% of total project debt. While this limit is an improvement from the 2006 guidelines, it remains more restrictive than the legislation and creates a requirement for projects to obtain non-guaranteed debt.

### **1.2. Subordination of Non-Guaranteed Debt**

The 2007 NOPR, like the 2006 guidelines, requires that non-guaranteed debt be subordinated to guaranteed debt.

### **1.3. No Stripping of Non-Guaranteed Debt**

The 2007 NOPR stipulates that guaranteed creditors must also participate in providing non-guaranteed debt without the right to strip the non-guaranteed debt for sale to other lenders.

### **1.4. Combined effect of debt structure provisions**

The combination of these three provisions is a requirement that projects obtain subordinated and non-strippable non-guaranteed debt. The DOE view seems to be that this will push the due diligence of projects onto the lenders providing this debt.

However, there are concerns with this approach, including:

- The non-guaranteed debt may not be available in the commercial market, or will only be available at exorbitant rates and fees
- In order to comply with these requirements, borrowers may resort to measures that will undermine, if not defeat, the requirements; including collateralization of non-guaranteed debt through equity commitments, third party support, or debt service reserve fund requirements (just as "non-recourse" project finance loans may contain implicit recourse provisions)
- The interests of DOE and the interests of lenders may not be aligned, at least with respect to the non-guaranteed, subordinated portion of the debt
- The no-stripping provision clashes with the realities of commercial lending markets, where the well-established market in guaranteed debt may not be available for the new bundled hybrid instrument consisting of the guaranteed debt and the unsecured, non-guaranteed debt

An alternate approach might remove these three requirements, so that the initial round of nuclear plants would receive the benefits that the legislation provided.

## **2. Subsidy Cost Calculation**

DOE has to date declined to provide a method for calculating the subsidy cost of guaranteed loans.

The approach to calculating subsidy cost approach is well established in FCRA and in routine practice in other federal government loan guarantee programs, where probability of default models are used to estimate expected government payments and recoveries and develop subsidy cost estimates. Such models rely on statistical analysis of large loan portfolios.

Projects eligible for Title XVII loan guarantees may not fit well into such a probability of default approach. There is industry concern that such models may

be used in conjunction with probabilities of default derived from loans to publicly-owned utilities for nuclear plants several decades ago. This might result in subsidy costs that ignore the significant changes in NRC licensing, nuclear technology and other factors, defeating the underlying purpose of Title XVII.

Two alternate approaches are recommended:

- DOE's adoption of an method for calculating subsidy costs that will provide applicants with the ability to understand the magnitude of the subsidy costs and to manage the project aspects that will drive subsidy costs, or
- Adopt legislation that provides for government funding of the subsidy costs, as in other government loan programs.

### **3. *Government Exposure to Commercial Risks***

As currently defined, a DOE loan guarantee covers the full range of risks faced qualifying projects over a period up to 30 years. This would significant risks not central to the goals of Title XVII, such as market offtake risk, contract counterparty risk, and operating and maintenance risk. This approach will either result in a screening of applications so that only the least risky projects receive loan guarantees or high subsidy costs.

This exposure to commercial risks over a term that may be 30 years may be driving some of the other features of the loan guarantee program, particularly the debt structure provisions.

An alternate approach might be to structure the DOE guaranteed debt with a much shorter term (e.g., a term that extends to no more than 2 years after commercial operation), with a requirement that borrowers re-finance the guaranteed debt with commercial debt at the end of this shorter term. Under this approach, the DOE guaranteed debt might be similar to a commercial construction loan and other restrictive loan guarantee provisions might be relaxed without exposing the government to excessive risk.

### **B. Conclusion**

DOE's implementation of Title XVII is at a critical juncture. The 2007 DOE NQPR implements Title XVII in a manner that may not achieve the goals of the legislation and that may stop the revival of nuclear power in the U.S.